EXHIBIT 1

Version 2.5.2.0

Abstract

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Grant Number:	5R23AI023058-02
Project Title:	CDNA ANALYSIS FOR SUBSET-SPECIFIC T-CELL GENE EXPRESSION

PI Information:	**Name**	**Email**	**Title**
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Abstract: *The primary objective is to isolate and characterize extensive sets of cytolytic and helper T cell-specific mRNA's by cDNA analysis. cDNA libraries for murine helper T (L2) and cytolytic T (L3) cell clone were prepared using Lambdagt10 and Lambdat11 as cloning vectors. A protocol which allowed us to isolate subset-specific cDNA's exhaustively has been developed. A large number of helper and cytolytic T-cell cDNA clones which were not expressed in B-lymphocyte were isolated. The cDNA clones will be classified into those cDNA's expressed in 1) both helper and cytolytic T cells, 2) helper T cells only and 3) cytolytic T cells only. Each set of cDNA clones will be divided into groups of related sequences. The nucleotide sequence of representative full length cDNA of each group will be determined. Each group of the cDNA will be further characterized by determining whether the molecules are associated with membrane or secretory, whether the corresponding genomic DNA have undergone somatic rearrangements, whether the molecules are expressed constitutively or are inducible. Selected unknown cDNA clones will be tested for their roles in helper or cytolytic T-cell activities. The experiments will involve the expression of the cDNA in E. coli and raising antibodies against the products. The antibodies will be tested for the ability to block helper or cytolytic T-cell activities. Finally the regulatory sequences for cell-specific expression will be determined in selected helper or cytolytic T cell-specific genes, by analyzing the expression of genes introduced into the mouse germ line. The identification of factors and components expressed specifically by helper or cytolytic T-lymphocytes may aid defining various steps of the immune responses. This could lead to the development of the measures to treat diseases associated with immune disorders. Furthermore, one can potentiate or manipulate certain steps of the immune response so as to cure certain diseases such as human cancers.*

Public Health Relevance:
This Public Health Relevance is not available.

Thesaurus Terms:
ALLERGY AND IMMUNOLOGY STUDY SECTION, BLOOD CELLS, T LYMPHOCYTES, BLOOD CELLS, T LYMPHOCYTES, HELPER, GENETICS, BIOCHEMICAL GENETICS, MOLECULAR CLONING, GENETICS, GENES, GENE EXPRESSION, GENETICS,

GENETIC REGULATION, GENETIC INDUCTION-REPRESSION-DEREPRESSION, IMMUNOGENETICS (GENERAL), NUCLEIC ACIDS, COMPLEMENTARY DNA, genetic manipulation
BLOOD CELLS, LYMPHOCYTES, KILLER CELLS, GENETICS, GENES, OPERON, REGULATORY GENE, GENETICS, GENETIC LIBRARIES, IMMUNITY, IMMUNOREGULATION, NUCLEIC ACIDS STRUCTURE, NUCLEOSIDES (TIDES) SEQUENCE, NUCLEIC ACIDS, SYNTHETIC NUCLEIC ACIDS, HYBRID NUCLEIC ACIDS, POPULATION STUDIES CELL
ANIMALS, TRANSGENIC ANIMALS, IMMUNOLOGY, ANTIBODIES, BLOCKING ANTIBODIES, MAMMALS, RODENTS, MYOMORPHA, MICE (LABORATORY)

Institution:	GUTHRIE FOUNDATION FOR EDUCATION AND RES EDUCATION AND RESEARCH SAYRE, PA 18840
Fiscal Year:	[redacted]
Department:	
Project Start:	[redacted]
Project End:	[redacted]
ICD:	NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES
IRG:	ALY